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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,729	03/29/2001	Hironori Yahagi	826.1721	4351

21171 7590 09/30/2004  
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EXAMINER

HONEYCUTT, KRISTINA B

ART UNIT PAPER NUMBER

2178

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/819,729	<b>Applicant(s)</b> YAHAGI, HIRONORI	
	<b>Examiner</b> Kristina B. Honeycutt	<b>Art Unit</b> 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/16/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is responsive to communications: Application filed March 29, 2001 with acknowledged foreign priority date September 28, 2000 and I.D.S. filed April 16, 2001.
2. Claims 1-11 are pending in the case. Claims 1, 3, 9-11 are independent claims.

### ***Specification***

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. For example on page 2, line 4, "http://www.w3.org/TR/REC-xml". Applicant is required to delete **all** embedded hyperlinks and/or other forms of browser-executable code. See MPEP § 608.01.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by DeRose et al. (U.S. Patent 6105044).

**Regarding independent claim 1**, DeRose discloses a converting apparatus, comprising:

- a document inputting device inputting information of a structured document that is written with a set of hierarchical elements, and composed of a plurality of records each including one element or more (col. 7, lines 60-67; col. 8, lines 1-6 – as demonstrated in the cited text, a “document inputting device” inputs a document that is written with a set of hierarchical elements and composed of “records” and elements);
- a joining device generating a new element by joining contents of elements relatively at a same position among two records or more of the structured document (Figures 3 & 6; col. 12, lines 24-54; col. 18, lines 33-55 – as demonstrated in the figures and cited text, “a joining device” generates a new element at a same “position” among two “records” of the document);
- a generating device generating a new record that includes the new element and inherits a relative position relationship of elements in the two records or more (Figures 3 & 6; col. 11, lines 10-46 – as demonstrated in the figures and cited text, a “generating device” generates a new “record” including the new element and “inheriting a relative position relationship” of elements in two “records”);

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- a converting device converting the structured document by replacing the two records or more with the new record (col. 18, lines 44-55 – as demonstrated in the cited text, a “converting device converts” the document by replacing two “records” with the new “record”);
- document outputting device outputting the structured document after being converted (col. 17, lines 56-58; col. 18, lines 44-55 – as demonstrated in the cited text, a “document outputting device” outputs the document after being “converted”).

**Regarding dependent claim 2**, DeRose discloses the converting apparatus according to claim 1 further comprising:

- a key inputting device inputting a search key (col. 13, lines 34-37; col. 15, lines 29-35 – as demonstrated in the cited text, a “key inputting device” inputs a search “key”);
- searching device searching the structured document after being converted with the search key, extracting a character string corresponding to a position of a detected character string from contents of an element in a certain record when the character string corresponding to the search key is detected from contents of another element in the certain record, restoring a record before being converted, which includes the search key, from the detected character string and the extracted character string, and outputting the restored record as a search result (col. 13, lines 34-37, 47-67; col. 14, lines 1-48; col. 17, lines 60-62 – as

demonstrated in the cited text, a “searching device” searches the “converted” document, extracts a character string corresponding to a position of a detected character string from contents of an element in a “record” when the character string corresponding to the search “key” is detected from contents of another element in the “record”, restores a “record” before being “converted” from the detected character string and the extracted character string, and outputting the restored “record as a search result”).

**Regarding independent claim 9**, the claim reflects the process of generating a new element, a new record and converting the document as claimed in claim 1 and is rejected along the same rationale.

**Regarding independent claim 10**, the claim reflects the program causing the computer to perform generating a new element, a new record and converting the document as claimed in claim 1 and is rejected along the same rationale.

**Regarding independent claim 11**, the claim reflects a converting apparatus inputting a document, generating a new element and a new record, converting the document and outputting the document as claimed in claim 1 and is rejected along the same rationale.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeRose et al. (U.S. Patent 6105044) in view of Ardoin et al. (U.S. Pub. No. 20020099684).

**Regarding independent claim 3,** DeRose discloses a “document inputting device” inputting information of a structured document written with set of hierarchical elements (col. 7, lines 60-67; col. 8, lines 1-6).

DeRose further discloses a “storing device” storing the information of the structured document (col. 7, lines 22-26).

DeRose further discloses a “joining device” generating a plurality of new elements by joining, as “synthesis targets,” content of each element included in a “first combination” of elements that successively exist side by side in a level immediately below a certain element and have a same element name, and content of each element included in a “second combination” of elements that have a same element name in a certain level lower than the elements of the first combination, elements in each level on a “route” from the elements of the “first combination” to the certain level having a same



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element name, in the structured document (Figures 3 & 6; col. 12, lines 24-54; col. 15, lines 20-24; col. 16, lines 45-56; col. 18, lines 33-55; col. 21, lines 6-10).

DeRose further discloses a “generating device” generating a “synthesized substructure” that includes the plurality of new elements, and inherits a “relative position relationship” of original elements among the plurality of new elements (Figures 3 & 6; col. 11, lines 10-46).

DeRose further discloses a “deleting device” deleting an unnecessary original Element (col. 10, lines 9-16).

DeRose further discloses a “converting device converting” the structured document into a structured document of a “synthetic type” configured by a “synthesized substructure” by using “said joining device, said generating device, said duplicating device and said deleting device” (col. 18, lines 44-55).

DeRose further discloses a “document outputting device” outputting the structured document of the “synthetic type” (col. 17, lines 56-58; col. 18, lines 44-55).

DeRose does not teach a duplicating device generating a duplication of an unjoined element below a new element included in a synthesized substructure generated from an element higher than the unjoined element. Ardoin discloses a “duplicating device” generating a “duplication” of an element below another element included in a “structure” (p.36, para. 573). It would have been obvious to one of ordinary skill in the art, having the teachings of DeRose and Ardoin before him at the time the invention was made, to modify a converting apparatus taught by DeRose to include generating a duplication of an element as taught by Ardoin, because generating

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a duplicate unjoined element would allow for two copies of the same element so that if changes are made to one, such as joining it with another element, the original element would still be available if needed.

**Regarding dependent claim 4**, DeRose discloses “generating device” generates the “synthesized substructure” if a combination of elements that successively exist side by side and have a same element name in two levels or more on the “route” to the certain level is not found (col. 11, lines 43-62).

**Regarding dependent claim 6**, DeRose discloses “joining device” generates contents of the new elements by inserting a delimiter between the two “joined” contents (col. 11, lines 43-49).

**Regarding dependent claim 7**, DeRose discloses “joining device consecutively” inserts the delimiter in the contents of new elements if content of an element which becomes the “synthesis target” is “lacking” (col. 10, lines 65-67; col. 11, line 1).

**Regarding dependent claim 8**, DeRose discloses a “key inputting device” inputting a search “key” (col. 13, lines 34-37; col. 15, lines 29-35).

DeRose further discloses a searching device comparing a character string between two delimiters, which is included in contents of elements within the structured document of the synthetic type, with a character string of the search key, obtaining an

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order of a delimiter preceding a character string corresponding to the search key when the character string corresponding to the search key is detected from contents of elements within a certain synthesized substructure, extracting a character string between a delimiter corresponding to the order and a next delimiter in contents of another element in the certain synthesized substructure, restoring a corresponding portion of the structured document before being converted from the detected character string and the extracted character string, and outputting the restored portion as a search result (col. 13, lines 34-37, 47-67; col. 14, lines 1-48; col. 18, lines 60-62).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeRose et al. (U.S. Patent 6105044) in view of Ardoin et al. (U.S. Pub. No. 20020099684) and further in view of Alam et al. (U.S. Patent 6336124).

**Regarding dependent claim 5**, DeRose does not teach joining device divides the second combination of the elements into a plurality of groups each composed of a predetermined number of elements, and specifies the synthesis targets based on the predetermined number of elements included in each of the groups. Alam discloses "joining device" divides combinations into a plurality of groups composed of a "predetermined number of elements" (col. 15, lines 56-67; col. 16, lines 1-14). It would have been obvious to one of ordinary skill in the art, having the teachings of DeRose and Alam before him at the time the invention was made, to modify a converting apparatus taught by DeRose to include dividing the combination of the elements into a

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plurality of groups each composed of a predetermined number of elements as taught by Alam, because elements would be divided so that the element could be displayed within the display parameter, as taught by Alam (col. 15, lines 65-67; col. 16, lines 1-3). It would have been advantageous to one of ordinary skill to utilize such combination because the element would be displayed in its entirety upon division so that the user would not have to scroll in order to see the whole element.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Method of clustering electronic documents in response to a search query. (U.S. Patent 6167397)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristina B. Honeycutt whose telephone number is 571-272-4123. The examiner can normally be reached on 8-5:00 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 703-308-5465. The fax phone number for the organization where this application or proceeding is assigned is 571-272-4124.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBH

  
STEPHEN S. HONG  
PRIMARY EXAMINER